State Water Quality Standards Informal Advisory Committee
Comments on Proposed Amendments – March 7, 2005

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Following are comments from Alexander & Baldwin, Inc. regarding the proposed amendments to the state water quality standards dated March 7, 2005.

1. The proposed §11-54-1 deletes the definition for the term "ambient conditions". The stated reason is that the term describes a "shifting baseline" approach to environmental management that "has raised antidegradation policy concerns". The rationale document makes reference to a "policy statement" proposed to replace the term "ambient conditions" that is not included in the Ramseyer version of the proposed rule, and it is not clear whether this policy is intended to be included in the rule or elsewhere. The policy statement is not appropriate for inclusion into the regulation. The existing "general policy of water quality antidegradation" (§11-54-1 .1) addresses the situation cited in the proposed new policy statement.
2. The proposed §11-54-1 includes a definition of the term "reference sites". According to the rationale document, the definition is intended "to clarify what we mean by "reference sites" for waters ranked from "very poor" to "excellent" quality of waters, habitat and aquatic integrity" (sic). In addition to the proposed definition itself being extremely unclear, it is unclear why this term needs to be defined at all in the regulation, as it does not appear elsewhere in the regulation. While the term may be used in certain metrics for the evaluation of "habitat and aquatic community integrity", such metrics are not currently part of the WQS. The definition is therefore unnecessary and should be deleted.
3. The proposed §11-54-1 includes a definition of the term "sample size". The example provided in the definition does not appear to clarify the definition in any way and should be deleted.
4. The proposed §11-54-1 amends various definitions relating to salinity ranges and to the proposed reorganization of water body classifications on the basis of salinity. Comments on this proposal are provided below.
5. The proposed §11-54-2 reorganizes water body classifications on the basis of salinity; corresponding water quality standards are amended accordingly. The proposed reorganization is purported to "clarify the correct choice of a WQS numeric table to use for data evaluation in waters with differing salinity ranges, and thus allowing persons using this rule to differentiate between pollutant loads and natural composition". The rationale document states that "no numeric criteria have been changed, except in the table of oceanic criteria". While the criteria themselves have not been changed, however, some of the waters to which the various criteria will apply have been changed, and in fact some waters may be required to meet different sets of criteria at different times. As stated in the rationale document, salinity zones will move inshore and offshore, depending upon tidal changes and frequency of rainfall events. As an example, the "salinity-based" reach of an estuary (to which the water quality criteria in the proposed Table 2 would apply)

may at times extend upstream beyond the physical boundaries of the estuary (as defined in §11-54-1). Thus, lower reaches of streams influenced by tidal changes may at times be required to meet the water quality criteria for streams in the proposed Table 1 (which itself has separate criteria for wet and dry conditions), and at other times be required to meet the more stringent water quality criteria of Table 2 (which does not differentiate between wet and dry conditions). Similar changes in the areas subject to the various salinity-based criteria will occur in nearshore waters. Rather than simplifying the application of the water quality criteria, it would appear that the reorganization on the basis of salinity will greatly complicate the application of water quality criteria. Importantly, there is no description in either the proposed regulation or in the rationale document as to how variations in salinity at a given location within a water body will be addressed with respect to evaluating conformance with the water quality criteria. The rationale document also points out that water quality data needs to be collected, especially in fresh-to-brackish and brackish-to-saline transitional zones "in order to determine if any of the numeric criteria for different water body types require amendment"; in other words, the two sets of numeric criteria that would apply to these transition zones may not be appropriate. In the interim, water quality data may be collected that would support designating water bodies as impaired on the basis of these inappropriate criteria. It would appear that adoption of the proposed classification system would be premature until appropriate data to support numeric criteria for different water body types can be collected and technical matters regarding how to apply multiple criteria in waters of varying salinity (i.e., transitional zones) can be resolved.

6. In the proposed §11-54-3(b)(1), the discharge prohibition in Class 1 waters is changed from "Waste discharge into these waters is prohibited" to "Discharge of any pollutant into these waters is prohibited". **The proposed change is far more restrictive (prohibiting the discharge of all pollutants, not just "waste") than is the existing language, and is neither mentioned nor justified in the rationale document or elsewhere.** In addition, either version of this provision has the potential to conflict with the proposed aquatic pesticide amendment in the event that a court eventually overrules EPA current interpretation that properly applied pesticides are neither "wastes" nor "pollutants". Absent justification for making the regulation more stringent, the existing "waste discharge" language should be retained with the addition of language consistent with the proposed aquatic pesticide amendment. The discharge prohibition should therefore read: "Waste discharge into these waters is prohibited, <u>except when in compliance with section 11-54-4(d)</u>". This comment also applies to all other sections where this change has been proposed, including 11-54-5.1(a)(2)(D) (proposed), 11-54-5.2(a) (existing), and 11-54-6(a) (proposed).
7. The proposed §11-54-3(b)(2) has been changed to read: "These waters shall not act as receiving waters for any discharge<u>, or pollutant,</u> which has not received the best degree of treatment or control compatible with the criteria established for this class. This addition significantly expands the applicability of this provision, which currently applies only to discharges of pollutants (i.e., from a point source). **The change has the effect of increasing restrictions under the water quality**

standards, yet is not even mentioned in the rationale document, much less justified. Moreover, since the proposed change has the potential to impact nonpoint sources of pollution, it calls into question the statement made in the rationale document regarding "the only areas in which additional costs may be incurred" as a result of the rule. This change is not justified and should be deleted from the proposal. This comment also applies to all other sections where this change has been proposed, including §11-54-3(c)(2).

8. The proposed §11-54-3(b)(2) has been changed so that certain provisions which formerly applied only to estuaries would now apply to all inland waters, including all streams (whether perennial or intermittent). These include the prohibitions on treated sewage discharges and on certain industrial discharges, activities that were not previously prohibited in inland waters other than estuaries (except to the extent that they are covered by the "no discharge" policy for Class 1 waters and natural freshwater lakes). **The change has the effect of increasing restrictions under the water quality standards, yet is not even mentioned in the rationale document, much less justified.** Moreover, since the proposed change has the potential to impact certain industrial discharges, it calls into question the statement made in the rationale document regarding "the only areas in which additional costs may be incurred" as a result of the rule. In particular, the proposed change has the potential to significantly impact small construction projects which, under 40 CFR Sections 122.26(b)(15)(i)(A) and (b)(15)(i)(B), may be exempted from certain requirements of NPDES general permits for stormwater discharges. Under the proposed change, such exemptions would be prohibited for small construction activities which discharge stormwater into streams or gulches. This change is not justified and should be deleted from the proposal. The existing language of §11-54-3(b)(2) pertaining specifically to estuaries should continue to apply only to estuaries (whether included here or in the section on marine waters), not to other inland waters.
9. The proposed §11-54-3(d)(2) has been changed to delete structural flood control channelization as an allowable activity (upon director approval) in Class II marine bottom ecosystems. No mention, explanation, or justification of this change is provided in the rationale document. Absent adequate justification, the change should not be made.
10. The proposed §11-54-4(a) has been changed to incorporate a scoring system to be used in evaluating the narrative "free from" criteria. There does not appear to be any purpose for the scoring system, which unnecessarily complicates the section. Under the current language, water bodies are evaluated to determine whether or not one or more of the substances "attributable to domestic, industrial, or other controllable sources of pollutants" is present; if present, then the respective "free from" criteria is not being met. Under the new language, a number would be assigned if the substance is present (1) or absent (0). The purpose of this change, if any, should be explained in the rationale document. As there does not appear to be any purpose for assigning numbers in lieu of simple statements (present or absent) to describe compliance with the "free from" criteria, the change should be deleted.
11. "Clarifying language" is proposed to be added to §§11-54-4(a)(1) through (3) to provide "examples of the types of materials or conditions to which these criteria are

applicable". The criteria themselves are self-explanatory, and the examples appear unnecessary and in some cases conflict with other provisions. In particular, the proposal specifies that "silt and/or clay" are to be classified as "materials that will settle to form objectionable bottom deposits" and are therefore prohibited under §11-54-4(a)(1). "Silt and/or clay" are more appropriately classified as "soil particles resulting from erosion" that are covered under §11-54-4(a)(6), and that are subject to the exception specified in the existing §11-54-4(c). The explicit inclusion of "silt and/or clay" into §11-54-4(a)(1) has the effect of rendering meaningless the exception provided for under §11-54-4(c) for erosion from land that is being properly managed during earthwork. **The impact of this change is not even mentioned in the rationale document, much less justified.** Moreover, since the proposed change has the potential to significantly impact agriculture, construction, and other land management activities, it calls into question the statement made in the rationale document regarding "the only areas in which additional costs may be incurred" as a result of the rule. This change should be deleted.

12. The proposed §11-54-4(a)(6) includes language, currently located in §11-54-4(c), that specifies under what conditions soil particles resulting from erosion on land subject to earthwork, both from construction and agriculture, may be present in state waters without violating the "free from" criteria. While the exception is correctly stated in the Ramseyer version of the rule, the rationale document incorrectly states that the exception is limited to agricultural lands. The rationale document should be changed to accurately reflect both the existing language of §11-54-4(c) and the proposed language of §11-54-4(a)(6) as stated in the Ramseyer version.
13. The Ramseyer version of the proposed §§11-54-5.1, 5.2 and 6 relating to the reclassification of waters along salinity gradients is confusing and should be re-written in the event that this change is to be retained (as noted in comment 5 above, it is recommended that this change be deleted in its entirety). For example, the proposed §11-54-5.1(b) and §11-54-5.2(d) relating to brackish waters and estuaries, respectively, are shown both as deleted (bracketed) in their entirety and with additional (underlined) language. Similarly, the proposed §11-54-5.2(a) removes the terms "saline lakes and anchialine pools" from the existing language but also inserts them elsewhere in the section.
14. The proposed §11-54-5.2 (i.e., Table 1) deletes the specific criteria for streams not to be exceeded more than two percent of the time. The "two percent criteria" are intended to account for brief periods of high flow resulting from large storm events that are likely to carry increased pollutant loads into the stream. The rationale document states that "data sets are typically too small for evaluation of the upper two percent of the data". Rather than delete numerical criteria that are necessary to account of large storm events, the Department should instead endeavor to collect sufficient data to accurately represent water quality in the streams, including but not restricted to water quality during large storm events. Unfortunately, in some cases data is currently collected from certain streams *only* during large storm events, when higher than normal pollutant loads are anticipated to be present (as reflected in the "two percent criteria"); these then form the only data available for comparison to the geometric mean criteria, which will of course be exceeded.

Decisions regarding impairment of streams are already badly skewed by using data frequently collected only during "two percent" or "ten percent" storms to represent the condition of streams at all times during the year. Deleting the criteria that attempts to account for natural fluctuations in pollutant loads will exacerbate the problem. The solution is to collect adequate data to properly characterize water quality in the streams across all flow regimes, rather than to attempt to assess water quality in the stream and make impairment decisions based on a limited data set that reflects primarily worst-case conditions. This comment also applies to the proposed deletion of the "two percent criteria" for estuaries.

15. The proposed §11-54-5.2 (i.e., Table 1) deletes the "wet season" (November-April) and "dry season" (May-October) criteria for streams and replaces them with criteria for "low flow" and "high flow" conditions. While this change would appear to make sense, given that "high flow" conditions may occur during the dry season and "low flow" conditions may occur during the wet season, it is unclear from either the proposed revision or the rationale document how this change will be implemented. For example, will rain gage or stream flow readings be used to determine whether data collected at a particular time should be compared to "low flow" or "high flow" criteria and if so what will be the dividing line between low and high flows? Also of concern is how past water quality data for streams will be assigned to a flow regime for the purposes of evaluating compliance with the applicable criteria. More detail regarding implementation is needed in order to evaluate this proposal.
16. The revised temperature criteria for various water bodies contained in the tables of the proposed Appendix A require that the water temperature shall not exceed 30 degrees Celsius, and that sample temperatures must remain within the range of temperatures measured at three control stations around the boundary of a project area. Presumably, temperatures at the control stations are assumed to be unimpacted by the project (i.e., are representative of ambient conditions). For consistency with the criteria in the existing rule, the sample temperature should instead be permitted to be within one degree Celsius of the range of temperatures measured at the control stations.
17. The following comments relate to the Rationale Document:
    a. The introduction to the Rationale Document states "the numeric WQS criteria are derived from data collected from minimally polluted state surface waters and reflect conditions in Hawaii's natural waters". This statement is not entirely correct. The existing turbidity standard for streams was arbitrarily selected after the original turbidity standard (based on a comparison to "natural background") was determined to be unenforceable due to a lack of sufficient data to characterize "natural background". The current turbidity standard has not been demonstrated to reflect conditions in Hawaii's natural waters, minimally polluted or otherwise.
    b. As discussed above, the Rationale Document states that "the only area in which additional costs may be incurred" as a result of the proposed revisions are implementation of the proposed aquatic pesticide amendment and the proposed indicator bacteria amendment. This is incorrect. The Rationale Document fails to consider, or even mention, certain proposed changes to the rules that have the potential to incur significant additional costs (see comments above regarding

proposed changes not addressed in the Rationale Document). In the event that these changes are not deleted, as recommended above, then the Rationale Document needs to be amended to address these additional costs.

18. The following comments relate to the proposed aquatic pesticide amendment:
    a. The proposed amendment to HAR Chapter 11-54 submitted by the Clean Water Branch should not be adopted because it imposes a permit requirement upon lawful pesticide uses (requiring an order of the director) regardless of whether a permit of any kind is required under the Clean Water Act.
    b. The proposed amendment to HAR Chapter 11-54 submitted by the Deputy Director of Environmental Health is largely identical to that submitted by the John Ford Advisory Group, with minor language variations. Unlike the Deputy Director's version, the Advisory Group version explicitly states that state waters may contain pesticides *in concentrations that exceed the limits in subsections (a) and (b)*. It is recommended that this clarifying language be included, since the water quality standards do not currently prohibit the presence of pesticides in state waters, so long as they are not present "in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water" or in concentrations exceeding the corresponding acute or chronic toxicity standard. The Deputy Director's version provides that the pesticides must be "applied under permits required by the federal Clean Water Act, if any", while the Advisory Group version provides that the pesticide (use) must be "in compliance with HAR Chapter 11-55" (which would include, if applicable, any requirement for an NPDES permit). The latter language does not imply that a permit is needed, and is therefore preferable.
    c. To address the "no discharge" policy applicable to anchialine pools and the potential need to apply aquatic pesticides to anchialine pools to control invasive species, the amendment includes a proposed change to §11-54-5.2. The language of the proposed change was adapted by the Advisory Group from an earlier version of the proposed amendment developed by the Department of Health in which the existing language ("Waste discharge into these waters is prohibited.") was changed to "Discharge of any pollutant into these waters is prohibited except…". Because discharges of pollutants into natural freshwater lakes, saline lakes, and anchialine pools are typically not an issue for agriculture, conservation land management, industry, or development, this change in language from "waste discharge" to "discharge of any pollutant" was viewed by the Advisory Group as non-controversial. On closer examination of the regulation as a whole, it is apparent that the "no discharge' policy applies to other waters as well, including Class 1 streams (at §11-54-3(b)(1)). The phrase "discharge of any pollutant" is much broader than the phrase "waste discharge", making the amended language more restrictive with respect to all discharges other than those involving pesticides. Absent any compelling justification to make the regulation more stringent in this regard (and none has been provided), the existing phrase "waste discharge" should be retained in the amended language, and the section should read: "Waste discharge into these waters is prohibited, except when in compliance with section 11-54-4(d)". Both phrases

provide the required protection for pesticide applications. As noted earlier, the language change proposed for §11-54-5.2 should be applied to other sections of the regulation where the "no discharge" policy is applied, including §11-54-3(b)(1).

d. Both the version of the aquatic pesticide amendment rationale document prepared by the Advisory Group and the adapted version prepared by the Deputy Director provide a sound evaluation of the basis for proposing this change to the regulation. Either version could be included in the rule amendment, although the abridged version may be preferable for the sake of brevity.

19. The following comments relate to the proposed NPDES General Permit Authorizing the Discharge of Aquatic Pesticides (Appendix M to HAR Chapter 11-55):

a. In light of the most recent interpretive statement and proposed rule issued by EPA regarding application of pesticides to waters of the United States in compliance with FIFRA (70 FR 5093; February 1, 2005), it is questionable whether the proposed permit is needed. Since the proposed permit will impose burdensome requirements upon applicators of vector control chemicals that at minimum will increase the cost of applications and at worst may impede the effectiveness of West Nile Virus control efforts in the state, it is also questionable whether incorporating an unnecessary permit requirement into the state's water pollution control regulation is good policy. However, the state clearly needs to ensure that its West Nile Virus control efforts will not be critically delayed or prevented by a lawsuit challenging EPA's interpretation of the Clean Water Act. As such, the decision to incorporate the proposed permit into HAR Chapter 11-55 is probably warranted. However, it is important that the state's adoption of such a permit for this specific, time critical application not be misconstrued as a policy decision affecting all aquatic pesticide applications (including those for which a permit is neither being proposed nor is desired). This is particularly important in light of comments in the Deputy Director's rationale document alluding to the fact that states may adopt laws stricter than federal requirements "and new DOH rules to issue permits for pesticide could be characterized that way". Therefore, a clear statement should be made, either in the proposed permit, in HAR Chapter 11-55 (proposed section 11-55-34.2(b)(12)?), or in HAR Chapter 11-54, regarding current DOH policy with respect NPDES permit requirements for other aquatic pesticide applications.

Suggested language that could be included in Section 1(a) of the draft permit follows:

> "This general permit covers discharges of aquatic pesticides applied directly into the water body or directly to organisms in the water or on the water surface with the intent of killing the target organism. Vector control agencies and other pesticide applicators may obtain coverage under this general permit irrespective of whether or not such coverage is required by this chapter, HRS Chapter 342D, or the Clean Water Act."

This amended language will also make it clear that private entities who may undertake vector control activities potentially covered by the permit are not obligated to obtain permit coverage unless coverage is mandated by HAR Chapter 11-55, HRS Chapter 342D, or the Clean Water Act.

b. The list of allowable active ingredients included in the draft permit includes only mosquito larvicides. Depending upon the intended approval process for other alternative pesticides, it may be prudent to amend the draft permit to include one or more of the commonly used mosquito adulticides (e.g., permanone, pyrenone, Naled) that also could conceivably require permit protection.
c. The proposed permit requires water quality sampling to demonstrate that "post-application water quality of the receiving waters shall not exceed pre-application water quality". Depending upon the timing of the sampling, it may be impossible to make this demonstration. Aquatic pesticides will not function if they are not present – i.e., detectable – in the water for some period of time after application. They should therefore be expected to be detected in post-application water samples for some period of time after application. It is not clear from the draft permit when post-application monitoring is to be conducted and whether a sufficient period of time will be allowed to allow dissipation of the active ingredient prior to sampling.

Thank you for the opportunity to contribute my comments, and please feel free to call me at (808) 877-2959 with any questions.